

Notes on *Plebicula dorylas magna* BÁLINT, 1985 (Lepidoptera, Lycaenidae)

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Recently, I described a new subspecies of *Plebicula dorylas* (D. & S., 1775) from the Eastern Carpathians, under the name *magna* (BÁLINT, 1985). Figures of the male genitalia were published later, together with details of additional specimens discovered in the collections of the Naturhistorisches Museum, Wien and the Zoologische Staatssammlung, München (BÁLINT, 1986).

Since the original description, I have come across a number of interesting literature references to *dorylas* in the Carpathians.

HORMUZAKI (1897) recorded *dorylas* from North Moldva (formerly South Bukowina, which was the most easterly province of the Austro-Hungarian Empire), although under the name *hylas* Esp. According to his observations, this species was widespread in the subalpine and alpine regions, but virtually absent from the hill-country and low mountain areas, where it occurred only near Csernovic (Černovici). HORMUZAKI described the Moldavian specimens : "... Alle ♂ sind gross (bis 37 mm) ; auf der Unterseite ist der weisse Saum auffallend breit, der von diesem ausgehende Wisch füllt die Zelle 3 fast aus und reicht über den dritten Medianast ; der weisse Mittelfleck sehr ansehnlich, alle Randflecke verloschen, die dunkeln gewöhnlich verschwunden, die rothen bloss auf den Hinterflügeln durch kleine, getrennte, nicht schwarz gesäumte Dreiecke angedeutet, an deren Aussenseite unbedeutende bräunliche Punkte im weissen Saume stehen. Augenflecke auf den Hinterflügeln bisweilen nur durch kleinere Punkte angedeutet, fehlen vollständig bei den alpinen Stücken, die auch sehr breite Fransen besitzen (var. *armena* STGR.). Das einzige, 29 mm spannende ♀ hat auf der Unterseite deutliche Augen, aber auch eine sehr ausgebreitete weisse Randzeichnung ; Oberseite schwarzbraun, ohne blauen Anflug, nur auf den Hinterflügeln mit zwei ganz verloschenen, trüb bräunlichrothen Analflecken. Fransen breit, hellbraun". HORMUZAKI identified his specimens as var. *armena* STGR. (see SEITZ, 1909). However, in Asia Minor and in Armenia, *dorylas* is smaller and has longer wings with different underside markings. His description fits *magna* so well that it is clear that HORMUZAKI's data refer to this subspecies.

CZEKELIUS (1897) and ABAFI-AIGNER, PÁVEL & UHRYK (1896) referred to *dorylas* from Gyilkostó, Transsylvania (Rumania : Lacu Roşu). Twenty years later, CZEKELIUS (1917) described two aberrations of *hylas*. One of them was called ab. *geographica magna*! The great size of the specimens from the Eastern Carpathians struck him. He wrote the following: "In beiden Geschlechtern um ein Drittel grösser als die Stammform. Die Unterseite auffallend bunt und kontrastreich. 15 ♂♂ und 8 ♀♀ unter sich gleich gross, keine Übergänge zur Stammform...". Unfortunately CZEKELIUS described his *magna* as an aberration, so his authorship is invalid according to the Rules of Zoological Nomenclature.

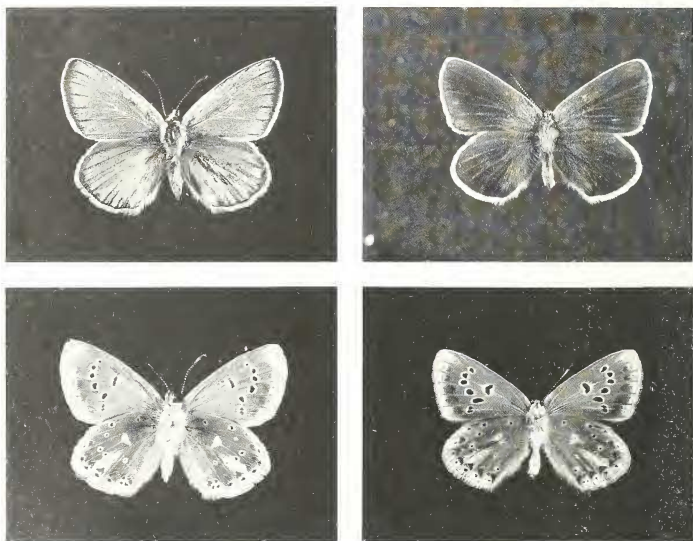


Fig. 1. Holotype (♂) and paratype ♀ (Gyergyó, Csiszér) of *Plebicula dorylas magna* BÁLINT.

During the 7th Hungarian Entomological Congress, Sándor SIMONYI and Lajos SZÉCSÉNYI (members of the Societas Entomologica Hungariae) exhibited the material that they had collected in Transsylvania. Among the butterflies, was a large male specimen of *dorylas*. It was collected with two further specimens in the Szalárd (Salárd) Valley, in the Görgényi (Gurghiu) Mountains by S. SIMONYI. HALTRICH (1982) also recorded *dorylas* from the

same valley, flying in mesophilous meadows. This establishes that *magna* occurs not only on limestone (BÁLINT, 1985), but also on volcanic basic rock. This is also confirmed by a specimen of *magna* that I found in the collection of Baron Dr. LIPTHAY while arranging the *Lycaena* material. This specimen has three data labels: "Hargita (Farkas-hágó), 1100 m, 1934.VII.11, DIÓSZEGHY" (DIÓSZEGHY's handwriting); "*Lyc. hylas* Es. f. *geographica magna* CZEK". (LIPTHAY's handwriting); "coll. LIPTHAY" (printed). The Hargita (Harghita) mountains rise south of the Görgényi Mountains, both of which are volcanic.

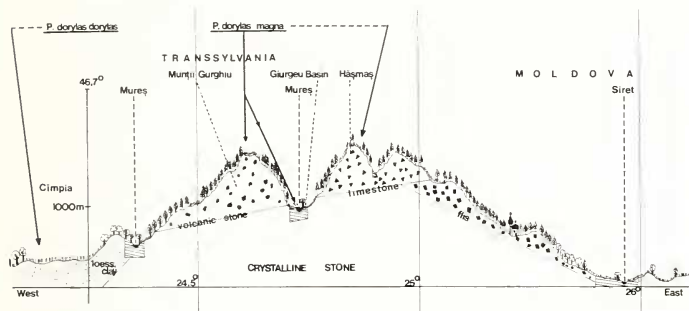


Fig. 2. Sectional drawing of the Eastern Carpathians (at 46.7°N) — The habitat of *Plebicula dorylas dorylas* D. & SCH. and *Plebicula dorylas magna* BÁLINT.

Many recent publications refer to *Plebicula dorylas* from the Eastern Carpathians (BARBU & COICHIA, 1980; BÁLINT, 1980, 1981, 1983; KOVÁCS & KOVÁCS, 1976-1977; KÖNIG, 1975 and POPESCU-GORJ, 1964, 1970). All of these populations are referable to ssp. *magna* and not to the nominate race. All the available information supports my observation that *P. dorylas magna* is univoltine and flies from the middle of June to the end of August in the mountains (BÁLINT, 1985), while *P. dorylas dorylas* has two broods and flies in Transsylvania, mainly on the Mezőség (Cimpia) (BÁLINT, 1985; KÖNIG, 1964; POPESCU-GORJ, 1964 and SZÉKELY, 1985) (fig. 2). However, the bivoltine form enters the valleys of the North Persányi (Persányi) Mountains and flies together with *magna*, e.g. in the Vargyasi (Virghișului) Gorge. Here, in some places, they form hybrid populations. It appears that *Parnassius apollo transsylvanicus* SCHWEITZER, 1912 often flies together with *Plebicula dorylas magna*. It is not yet clear how far the exact distribution extends.

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